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Wang

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(54) METHOD AND SYSTEM FOR PROVIDING WIRELESS MOBILE SERVER AND PEER-TO-PEER SERVICES WITH DYNAMIC DNS UPDATE

6,147,986 A * 11/2000 Orsic 370/349
6,226,523 B1 * 5/2001 Karlsson et al. 455/466
6,230,012 B1 * 5/2001 Willkie et al. 455/435
6,308,213 B1 * 10/2001 Valencia 709/229
6,421,339 B1 * 7/2002 Thomas 370/352

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FOREIGN PATENT DOCUMENTS

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EP 0 483 547 A 5/1992

* cited by examiner

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370/328, 329, 389, 475, 431, 437, 337,
442; 455/432, 433, 435, 436, 450; 709/223,
217, 227, 245, 249

(56) References Cited

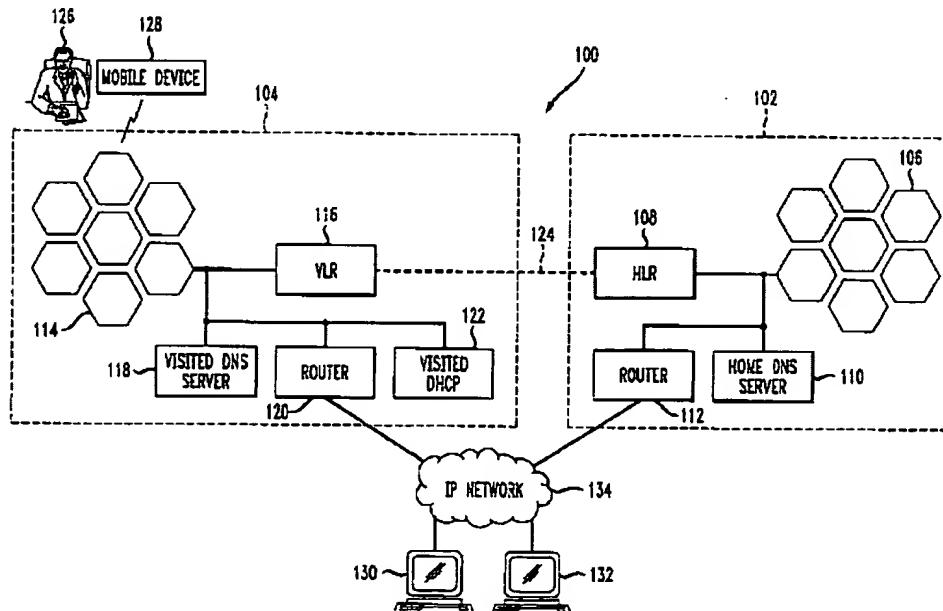
U.S. PATENT DOCUMENTS

5,590,175 A 12/1996 Gallant et al. 455/433
5,790,548 A 8/1998 Sistanizadeh et al. 370/389
5,793,762 A 8/1998 Penners et al. 370/401
5,797,096 A 8/1998 Lupien et al. 379/58
5,825,759 A * 10/1998 Liu 370/331
5,872,523 A * 2/1999 Dellaverson et al. .. 340/825.52
6,046,980 A * 4/2000 Packer 370/230
6,052,725 A * 4/2000 McCanna et al. 709/223
6,137,791 A * 10/2000 Frid et al. 370/352

ABSTRACT

A method and communications system provide data and voice services to subscribers at mobile terminals using dynamic IP address assignment and dynamic DNS update. A visited network dynamically assigns one of its IP addresses to a mobile terminal away from its home network accessing the visited network as a session IP address. The visited network transmits the assigned IP address to the home network of the mobile terminal over a private network. The home network associates the assigned IP address from the visited network with the host name of the mobile terminal in a DNS server of the home network and sends the host name to the visited network, although the visited network may already have received the host name from the mobile terminal. The visited network associates the host name of the mobile terminal with the assigned IP address its DNS server. Upon termination of the call by the mobile terminal, the visited network disassociates the assigned IP address with the host name in its DNS server and instructs the home network to do the same.

19 Claims, 4 Drawing Sheets



Contents

Field Codes and Definitions

Use the following codes with the <in> operator to specify a particular field for searching.

Field Name	Code	Note
<u>Abstract</u>	ab	
<u>Affiliation</u>	cs	Corporate Source.
<u>Author(s)</u>	au	
<u>Catalog Number</u>	ca	
<u>CODEN</u>	cn	
<u>Conference Title</u>	ct	See also <u>Title</u> .
<u>ISBN</u>	in	
<u>ISSN</u>	in	
<u>Issue Number</u>	is	
<u>Journal Name</u>	jn	Journal Name.
<u>Meeting Date</u>	cy	
<u>Part Number</u>	pt	
<u>Subject Term</u>	de	Descriptor.
<u>Title</u>	ti	See also <u>Conference Title</u> .
<u>Volume Number</u>	vo	

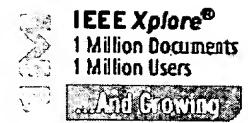
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